

Urban Water Footprint Lab: The case of Innsbruck

Final Conference

Debrecen, 20th November 2014

Identified needs (Innsbruck)

- Elevation: 550 - 2600 m / Area: 10.500 ha
- Inhabitants: 125.000 people (+23.000)
- Precipitation: 904 mm
- Temperature: annual 8.5°C

- Water supply: 1 main spring (+ 11);
total supply 42 mill (consumption 12 mill) per year
- Sewage system: 1 plant (designed for 400.000 people)
- Water network: almost all buildings connected

- Virtual Water > Limited data

No problem

Problem



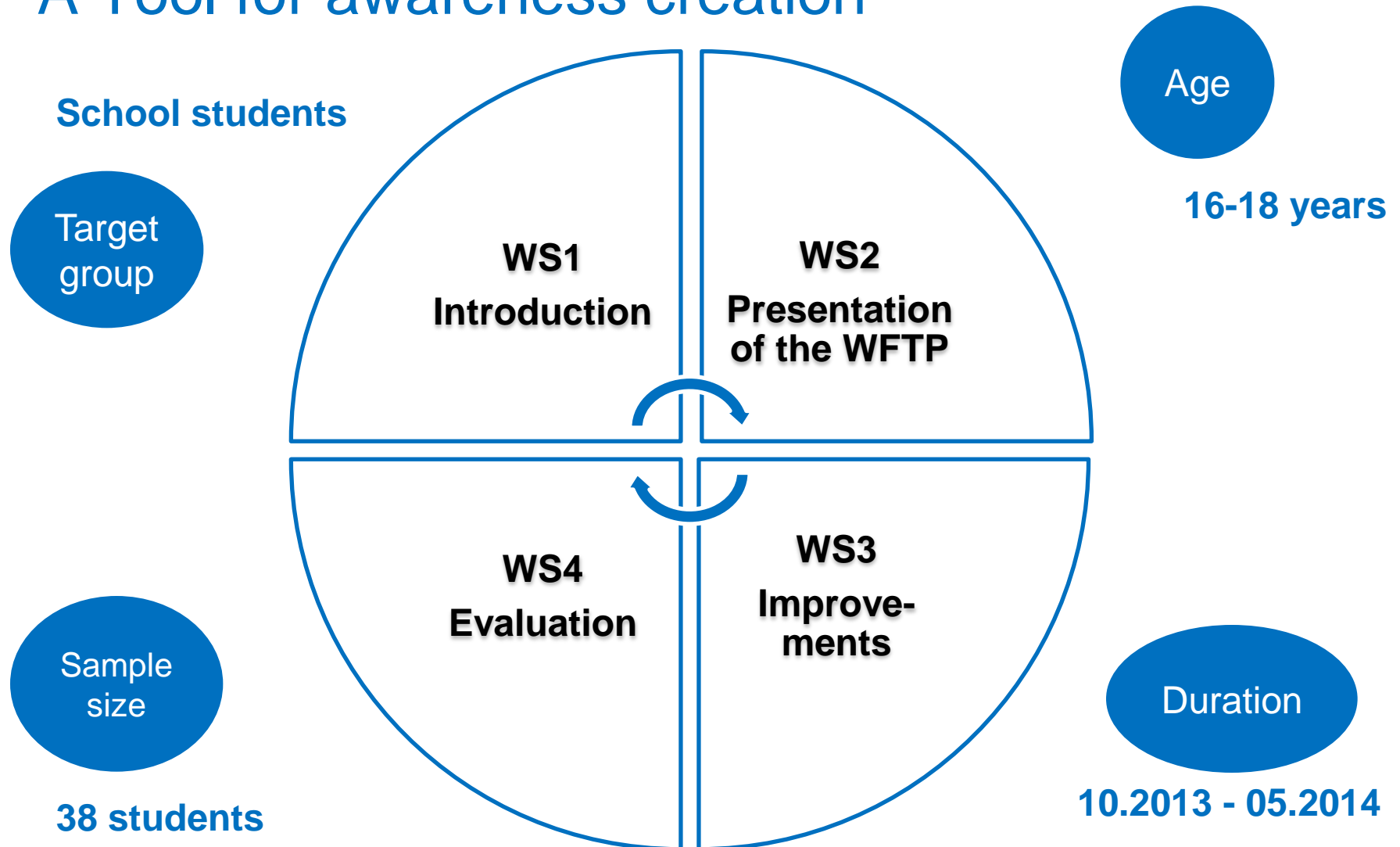
VIRTUAL WATER LAB

Goals

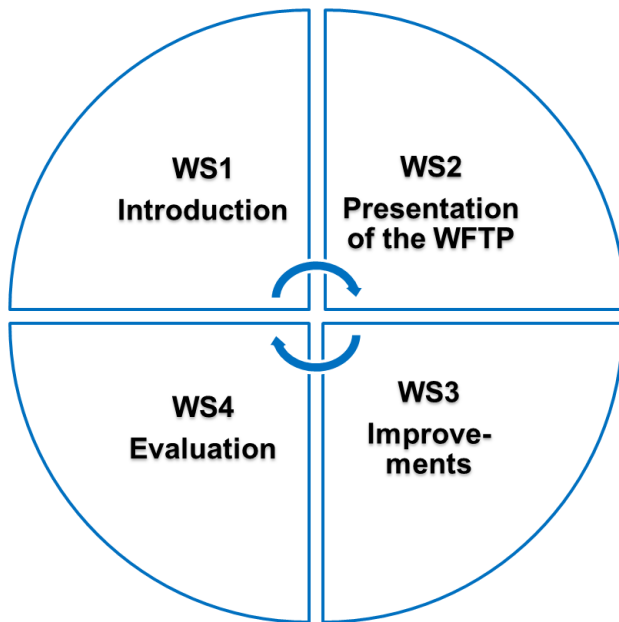
Focus on virtual water

- Monitoring water consumption
- Collecting virtual water data
- Creating awareness about virtual water and water consumption
- Developing measure and strategies to improve the individual WFTP
- Evaluating implemented measures and strategies

A Tool for awareness creation



Tool Extension



**Water
Week**

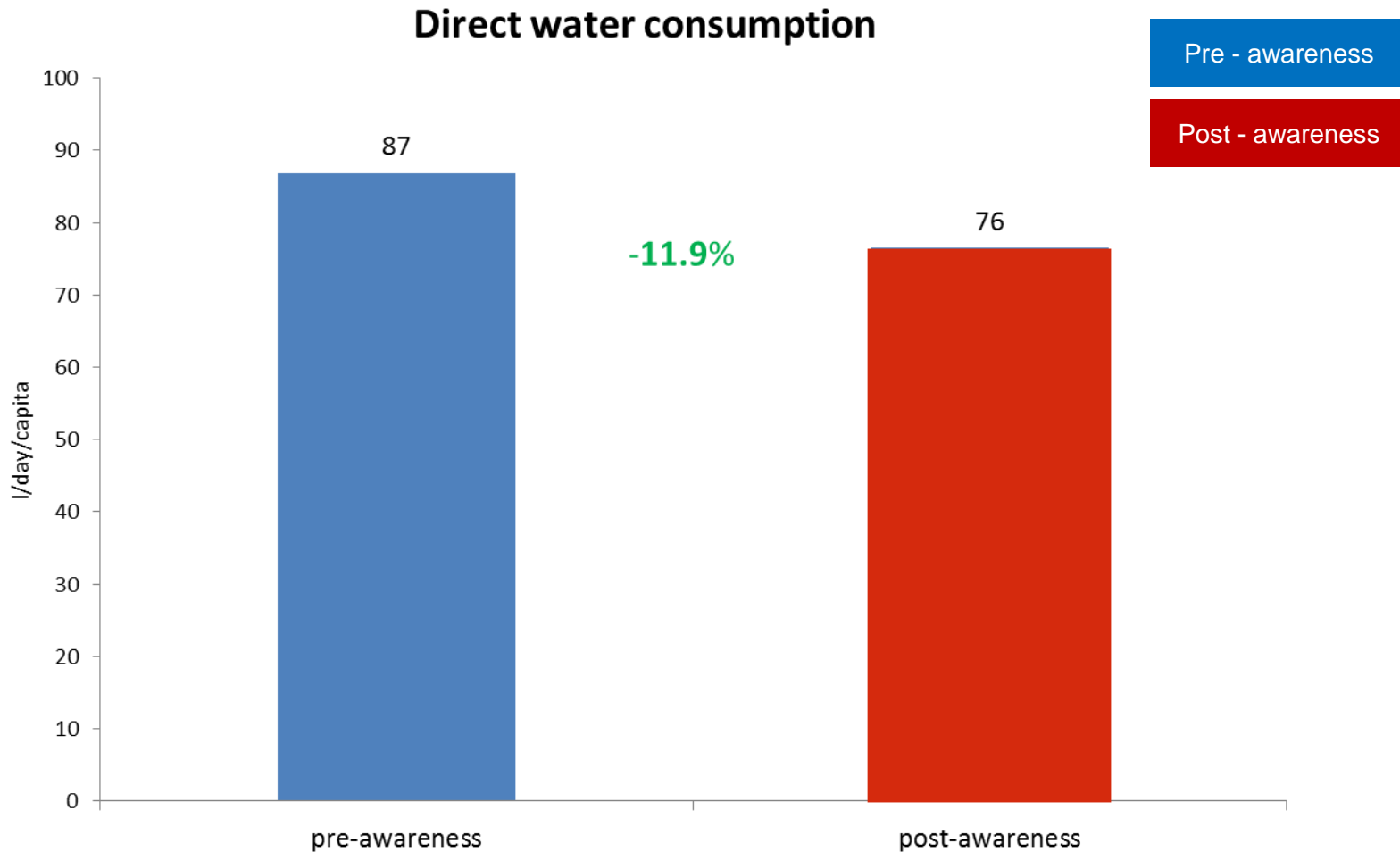


**Monitoring
entire
school**

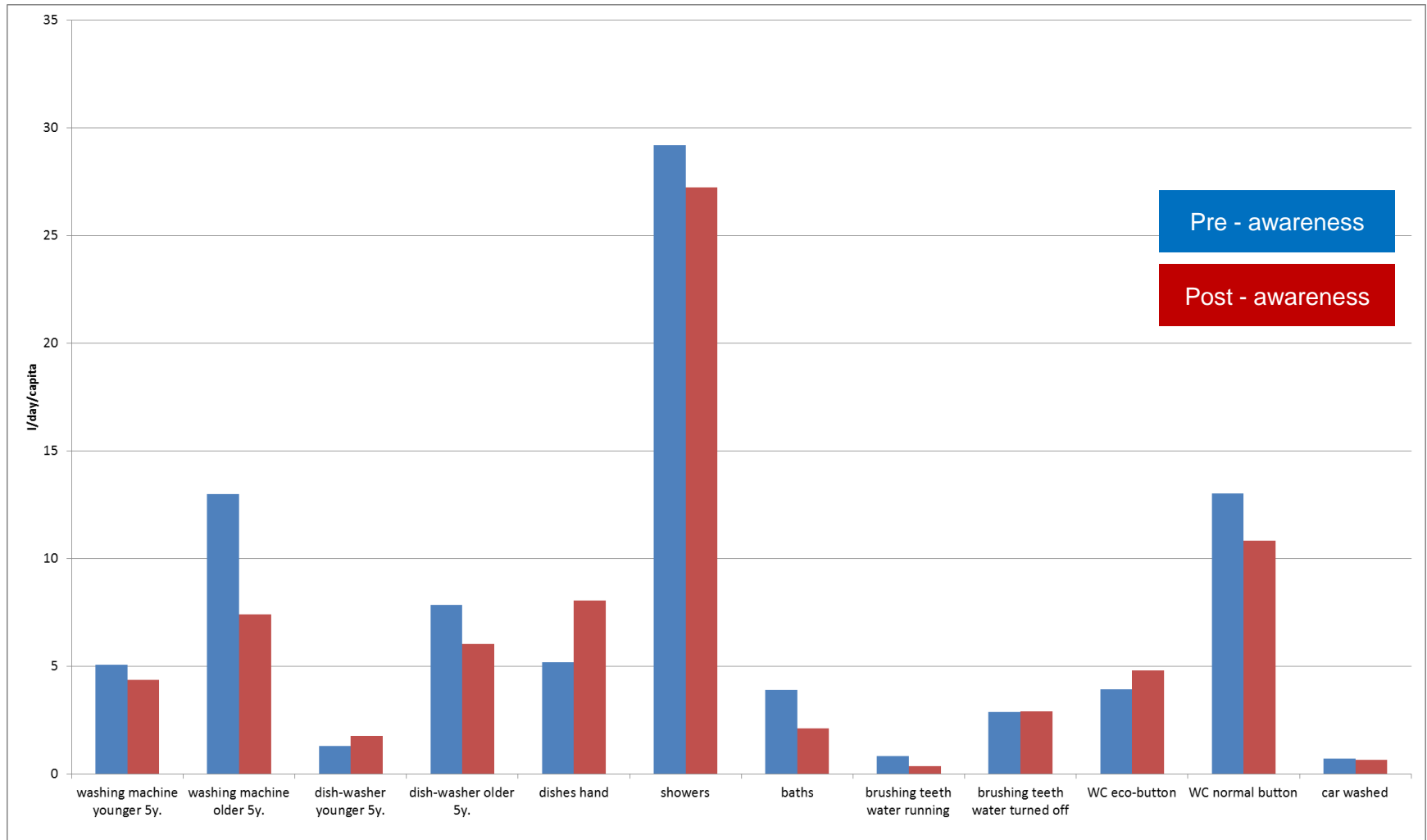
Benefits:

1. WFTP improvement evaluation (38 students)
2. Increasing sample size (38 → 224)

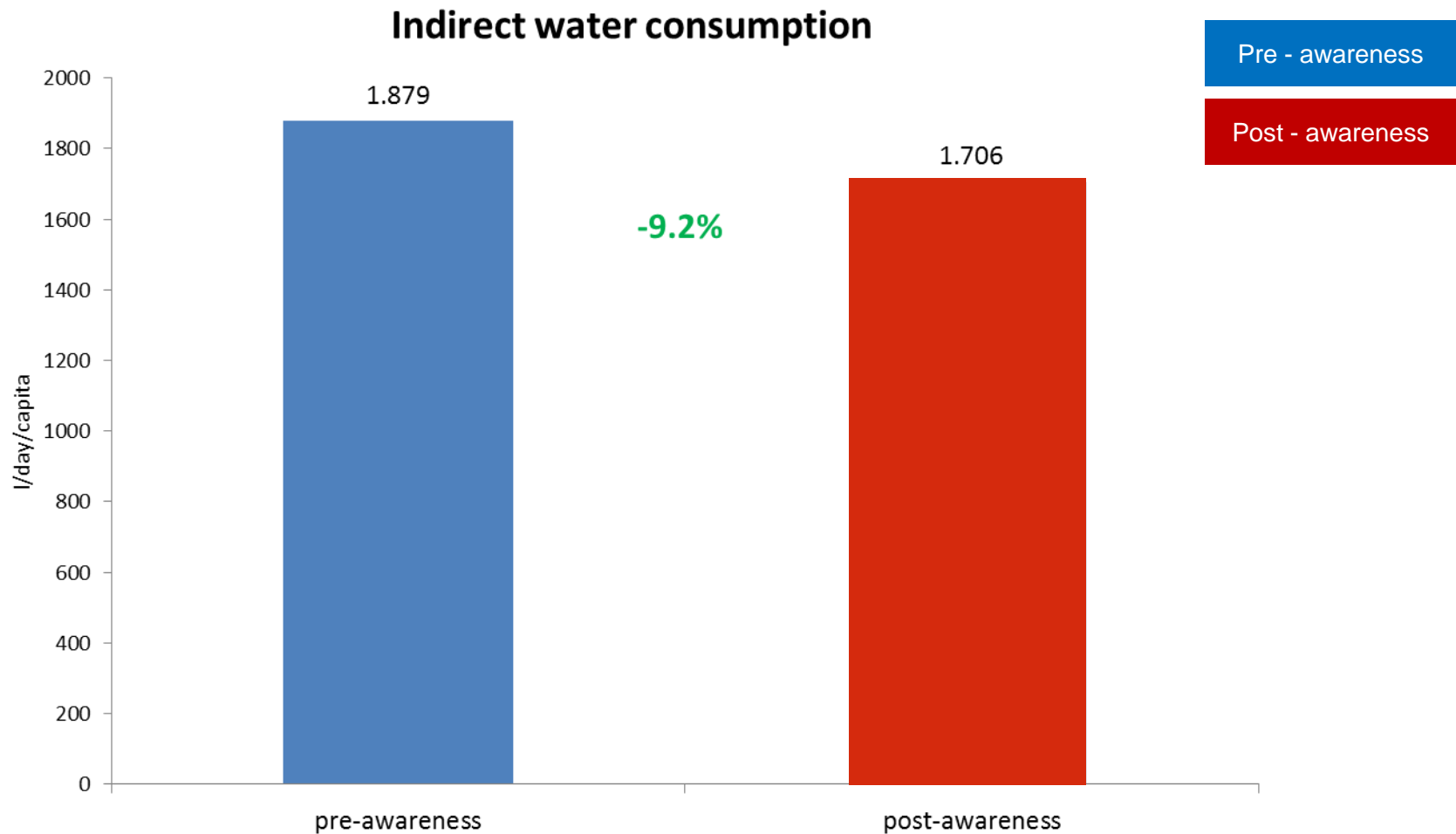
Effectiveness of awareness building



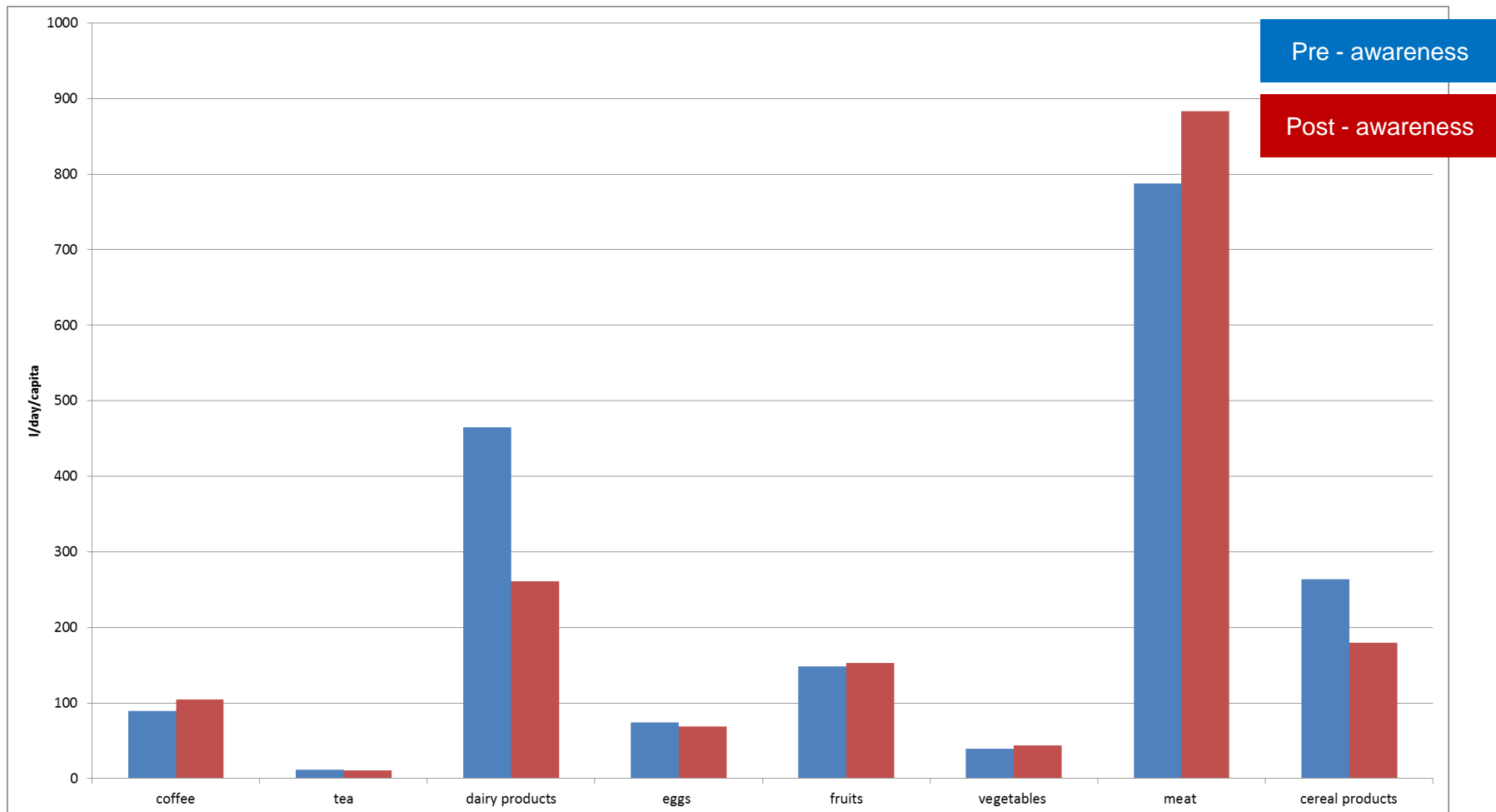
Direct water consumption



Effectiveness of awareness building



Indirect water consumption



Comparison sample size

	38 students	224 students	Deviation
Direct water consumption	86,8 L/C/D	82 L/C/D	- 5%
Indirect water consumption	1878,6 L/C/D	1914,7 L/C/D	+ 2%

Lessons learnt

- Main part of water use caused by food production (Vanham 2012)
- Reducing food wastes and changing diets has great potential to improve water consumption (Vanham 2012)
- Awareness campaigns are sustainable approach to improve water consumptions:
 - Cost-benefit
 - Multiplier effect
 - Long lasting behavioural changes

Future improvements

- Adapting WFTP monitoring
- Emphasis on post-education evaluation
- Virtual water flows
 - Map of water flows (import/export)
- Adaptation for other age groups
 - 5 school partners, 3 age groups



**Urban Water
Footprint**

4CE439P3 - URBAN_WFTP

*Introduction of Water FootPrint (WFTP) Approach in urban area to monitor,
evaluate and improve the water use*

Thank you!!

